

A COLOUR ANOMALY IN THE SPIDER *HETEROPODA VENATORIA* (LINNÉ) FROM JAPAN

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Although a considerable number of anomalies and gynandromorphs of spiders have hitherto been reported by many arachnologists, nothing seems to have been known on a lateral colour mosaic spider in a single sex, with the exception of a report by MIKULSKA and MARTINEK (1964) in Poland.

Recently, however, I have had an opportunity of examining a wonderfully coloured spider which is neither a mosaic hybrid nor a gynandromorphic one. It is apparently a bilateral colour mosaic in a female individual with a normal shape. A colour anomaly of *Tegenaria atrica* reported by MIKULSKA and MARTINEK appears only on the abdomen, but the present individual is almost completely bicoloured throughout its body.

Species : *Heteropoda venatoria* (LINNÉ); young female.

Locality : Kiinagashima-chô, Mie Prefecture.

Collectors: Messrs. Kenji KAIHATSU and Shinzo HIGASHI.

Date : September, 1970.

Measurements. Total length 15.5 mm; carapace 8 mm long, 7.7 mm wide; abdomen 10.3 mm long, 6.2 mm wide. Legs are shown below (in mm).

Leg	Fem.	Pat.	Tib.	Met.	Tar.	Total
I	9.5	4.1	8.2	7.6	2.5	31.9
II	10.8	4.4	9.1	8.2	2.5	35.0
III	8.7	3.3	6.9	6.3	2.2	27.2
IV	8.9	3.2	7.2	7.5	2.3	29.1
Palp	3.3	1.6	2.3		3.6	10.8

Cephalothorax and abdomen (dorsum and venter) are divided into two colours by a clear median line. The left half is black, much deeper in colour than in normal individuals. On the other hand, the right half is light brown, lighter than in normal ones. It seems, however, to be within a range of colour fluctuation. The

patterns on carapace, abdomen and legs are completely feminine. Chelicera, palp, legs and spinnerets are also black in the left side, light brown in the right side. Only in the epigastric area, sternum and labium, the boundary line of colours is indistinct, though their left parts are darker than the right. These colours are caused not only from those of integuments but also from hairs. The body is perfectly symmetric in shape as in normal individuals. No difference in shape between this individual and normal females can be recognized. The spination of legs is normal. The epigynum is symmetric, though barely visible owing to the immaturity.

It seems to me that such an individual was produced as the result of colour mutation in the left side or the abnormal segregation of factors responsible for pigmentation in the first cleavage.

I wish to express my heartfelt thanks to Mr. K. KAIHATSU, who offered such a rare and precious specimen for my study, and thanks are also due to Dr. H. KIKKAWA and Dr. S. UÉNO who gave me valuable suggestions and kind guidances.

Literature

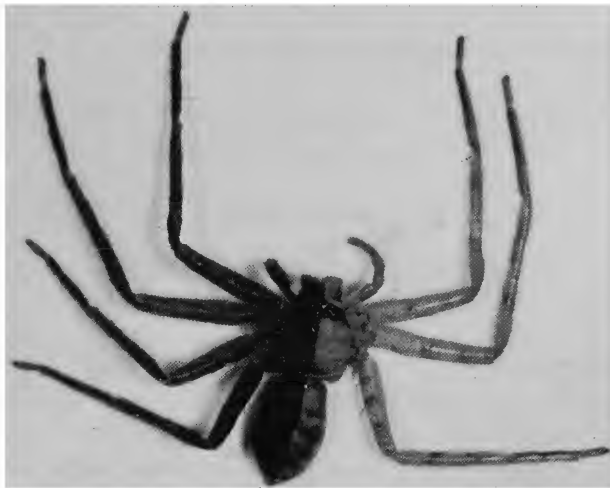
- MIKULSKA, I. & B. MARTINEK, 1964. Anomaly in colouring in the spider *Tegenaria atrica* C.L.Koch, 1843. Zool. Polon., **14**: 3-8, figs. 1-3.

Explanation of plate 2.

A bilateral colour mosaic of *Heteropoda venatoria* (LINNÉ)—The fourth right leg was lost in rearing.

Collectors : Kenji KAIHATSU & Shinzō HIGASHI

Photograph: Takeo YAGINUMA



A bilateral colour mosaic of *Heteropoda venatoria*